

FISH AND WILDLIFE DIVISION
ALBERTA SUSTAINABLE RESOURCE DEVELOPMENT

ALBERTA'S STRATEGY FOR THE MANAGEMENT OF

Species at Risk

(2009-2014)



Alberta

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1.1 Background

A Strategy for the Management of Species at Risk in Alberta was drafted in 1997. That original document provided guidance for 10 years of species at risk management in the province. It provided strong process direction for species' status evaluation, species' listing and recovery planning.

Since 1997 general and detailed status evaluation and recovery planning have been completed for many species. The 1997 strategy has been acted upon and many of the original objectives have been achieved or are ongoing. This revised document incorporates the strong process direction provided by that strategy and supplements it with increased emphasis on implementation of recovery actions, strategies to prevent species from becoming endangered, and conservation and stewardship programs for species at risk. Whereas the 1997 document was used to establish provincial processes, the current document describes the program that developed from that strategy and provides specific program guidance for the future. This document has been prepared to guide Alberta's species at risk program for the five fiscal years from 2009/2010 to 2013/2014.

Alberta's species at risk program is an integral component of a national process of working together to conserve and recover species at risk in all jurisdictions of Canada. Alberta is represented on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), for assessing and classifying the national status of species. Alberta also takes an active role in

"RENEW", the Committee for the Recovery of Nationally Endangered Wildlife. When Canada signed the United Nations *Convention on Biological Diversity* in 1992, both the federal and provincial governments took steps to ensure that species assessment criteria would be built upon those developed by the International Union for the Conservation of Nature (IUCN). In 1996 Alberta signed the national *Accord for the Protection of Species at Risk*, an agreement to work together with other provinces/territories and the federal government to develop laws and programs for protection of species at risk and their habitats. In 2002 the *Species at Risk Act* (SARA) was passed by Canada's parliament. SARA applies on federal lands (e.g., national parks), but Alberta's *Wildlife Act* is still the dominant legislation for management of species at risk on private lands and public lands under provincial jurisdiction. There are several federal/provincial committees in place to ensure a cooperative approach for the management of species at risk. At the time of preparation of this strategy, a Canada-Alberta bilateral agreement was being drafted to ensure ongoing inter-jurisdictional cooperation on species at risk conservation.

A *National Framework for Species at Risk Conservation* facilitates coordination and cooperation among jurisdictions, consistency in policies and procedures, and provides a base for the development of bilateral agreements. It explains the international context for Canada's species at risk and provides an overview and direction for species at risk conservation at the national level. The national framework identifies six "foundational elements" including:

- **Conservation** - emphasizing preventative approaches and conservation of biodiversity;
- **Governance and Legal Framework** - recognizing provincial and federal government roles, plus those of aboriginal treaties and encouraging federal-provincial bilateral agreements;
- **Knowledge** - considering science, aboriginal traditional knowledge and community knowledge;
- **Consultation** - consulting with affected parties on species at risk matters;
- **Socio-economic** - incorporating socio-economic factors into decision-making;
- **Stewardship** - adopting a range of stewardship and voluntary actions including education, incentives, and technical assistance to participants.

This document, *Alberta's Strategy for the Management of Species at Risk (2009-2014)* incorporates these six foundational elements into Alberta's species at risk program. It interprets Alberta's role within the national context. The strategy represents a bridge between conceptualization and action for the conservation of species at risk in this province by directing activities that provide Alberta-specific delivery of the national framework. Alberta's strategy provides direction for provincially-led initiatives and guides projects specifically suited to Alberta's unique circumstances, the landscape and our people.

1.2 Purpose

Species at risk are the most vulnerable components of Alberta's biodiversity. The integrity of Alberta's ecosystems is dependent on their continued presence. An effective strategy is needed to sustain these rare and threatened species.

Wild species are a keystone to healthy ecological processes providing environmental stability, with a subsequent benefit to the economic stability of our province and the social and economic well-being of Albertans. This keystone role is reflected in the high value that the large majority of citizens place on conservation of species at risk.

In plain language, Albertans want to know Endangered species are being protected using our own laws and programs, without a need to turn to federal legislation.

Alberta's Strategy for the Management of Species at Risk (2009-2014) provides the framework for species at risk management in this province. It provides direction for Alberta government staff involved in species at risk management. The document will also be useful to Alberta citizens particularly those involved with recovery teams, advisory committees and project partnerships, by helping them understand species at risk program processes, priorities and activities.



northern leopard frog

Implementation of this strategy will deliver many of the *Ministerial* commitments made for species at risk. In addition to conservation benefits, it will demonstrate effective management of species at risk by the Alberta government. Under *SARA*, the province is given the first opportunity to protect listed species, but if this obligation to protect is perceived as not being done effectively, then a "safety net" clause in the Act may lead to negotiation enabling the federal government to assume management responsibility for the species. By following *Alberta's Strategy for the Management of Species at Risk (2009-2014)*, Alberta will in effect, be insuring itself against loss of provincial jurisdiction to the federal government.

1.3

Relevance to Sustainable Resource Development Business Plan

Alberta's Strategy for the Management of Species at Risk (2009-2014) is an important delivery component of the Sustainable Resource Development *Business Plan (2008-2011)*. The business plan identifies Ministry priorities, and provides Vision, Mission, Goals and Strategies. *Alberta's Strategy for the Management of Species at Risk (2009-2014)* is consistent with the SRD Vision and Mission by encouraging responsible use of resources through application of leading practices in management, science and stewardship, for the long-term benefit of Albertans.

Alberta's Strategy for the Management of Species at Risk (2009-2014) contributes in some way to all the goals in the SRD Business Plan. It is relevant to Goals 1 and 3 (Lands and Forests) to help sustain economic, environmental and social values, and encouraging actions to protect watersheds and biodiversity. *Alberta's Strategy for the Management of Species at Risk (2009-2014)* is central to Goal 4 (Fish and Wildlife), with particular application to Strategy 4.3 (Develop and implement management plans for species at risk), Strategy 4.9 (Actions to support biodiversity), Strategy 4.10 (Promote stewardship through information, education and outreach programs), and Strategy 4.11 (Programs and policies to encourage private landowners to practise stewardship to maintain and improve habitat).

Alberta's Strategy for the Management of Species at Risk (2009-2014) is the primary delivery mechanism for achievement of the SRD Business Plan Performance Measure of sustaining Alberta wildlife with less than five per cent of provincial species being listed as species at risk.

1.4

Organization of the Document

Alberta's Strategy for the Management of Species at Risk (2009-2014) is organized into seven sections. The first is this introduction, followed by a chapter describing the program goal, objectives, and six strategies for conservation and recovery of wild species. Chapter 3 provides an overview of processes relating to each of the six strategies. The fourth section describes specific activities needed to achieve conservation and recovery of Alberta's species at risk, categorized within each of the six strategies. Chapter 5 describes the resource needs of Alberta's species at risk program, the process for allocation of Departmental funds to species at risk projects and a provincial staffing strategy. Chapters 6 and 7 provide a summary and suggested readings.

20 GOAL, OBJECTIVES AND STRATEGIES

2.1 Goal

To ensure that populations of all wild species are protected from severe decline and that viable populations are maintained, and where possible, restored.

2.2 Objectives

1. To identify species that are, or may be at risk and those for which management will help to prevent them from becoming at risk.
2. To identify and implement actions designed to restore species at risk to viable, self-sustaining levels.
3. To identify and implement actions designed to prevent species from becoming at risk.

2.3 Strategies

- STRATEGY #1:** **General Status:** Rank the relative security (General Status) of all wild species to prioritize risk assessment, data collection and conservation initiatives.
- STRATEGY #2:** **Detailed Status:** Assess and document the risk of becoming endangered for those species having a general status that suggests serious concern regarding current or future population viability.
- STRATEGY #3:** **Wildlife Act Listing:** Formally designate species that are *Endangered* or *Threatened*, as well as Species of Special Concern.
- STRATEGY #4:** **Recovery Planning:** Develop Alberta Recovery Plans for all *Threatened* and *Endangered* species.
- STRATEGY #5:** **Preventing Species from Becoming at Risk:** Develop management plans for Species of Special Concern, to prevent them from becoming *Endangered* or *Threatened*.
- STRATEGY #6:** **Implementing Recovery and Management Actions:** Coordinate and facilitate the implementing of recovery plans and management plans, with actions being carried out by government, non-government organizations, and private individuals.



Cape May warbler



3.1

Strategy 1

Rank the Relative Security of all Wild Species (General Status)

Alberta supports more than 500 distinct species of vertebrates and thousands of plant and invertebrate species. The first task in managing species at risk is to determine the relative security of all species and sort them into categories based on risk of becoming endangered. This is a coarse-filter assessment to prioritize those species that may need a more detailed assessment.

The Alberta General Status process fulfils four key needs:

1. Identification of species which are or may be at risk and require more detailed assessment to determine the scope, scale, and urgency of that risk.
2. Identification of species for which current information is inadequate to assess status and for which additional data/information needs to be collected.
3. Identification of species that are sensitive to human activities and require special management to prevent them from becoming at risk.
4. Contribution of provincial General Status ranks to the National General Status of Wild Species Process.

Alberta's General Status process delivers Alberta's commitment to monitor, assess and report on the status of wildlife, as identified in the national *Accord for the Protection of Species at Risk*.

3.2

Strategy 2 Assess and Document Risk of Becoming Endangered (Detailed Status)

Amendments to Alberta's *Wildlife Act* made in 1996 (Bill 42, *Wildlife Amendment Act*) created the process and structure for assessment of the risk of becoming endangered. Section 1(1) expanded the Minister's authority to designate *Endangered* species to include all vertebrates, plants and invertebrates. Section 9.1(1) indicated that the Minister shall establish and maintain a committee to be known as the Endangered Species Conservation Committee (ESCC), to function as an advisory committee to the Minister on matters related to the legal listing of species, the preparation and adoption of recovery plans, and any other species at risk matters on which the Minister requests its advice. Section 9.1(2) indicated that the ESCC shall establish, appoint, and maintain an independent scientific sub committee (SSC) to study and assess *Endangered* species and to recommend to the ESCC organisms that should be designated *Endangered* species.

Detailed status evaluations must be carried out in a manner that is both transparent and consistent. These characteristics are achieved by use of standard criteria that can be applied equally to a wide variety of species and by anyone seeking to examine the status of a particular species, with much the same result each time. A status evaluation must also be limited to the biological status of the species in question. Consideration of potential socio-economic issues around listing and/or recovery actions should be reserved for the formal designation and/or recovery planning stages.

Alberta's SSC and ESCC operate under these principles and using these processes. The Fish and Wildlife Division provides an ESCC/SSC Secretariat.

The SSC is composed of independent Alberta scientists who have expertise on a variety of species and/or aspects of conservation biology. During their evaluation, they rely on information compiled into a detailed status report, but they may also request additional information, which might require extra expenditure or other resources to acquire.

The ESCC is chaired by an MLA appointed by the Minister. The committee fulfils a consultative role demonstrating Alberta's commitment to consultation as a "foundational element" of the *National Framework for Species at Risk Conservation* (See Sec 1.1). The ESCC is composed of stakeholders representing industrial, agricultural, conservation, aboriginal and community interests. Its role is to provide balanced advice to the minister, with representation from a broad variety of interests. The ESCC considers the evaluation of the biological status of each species that the SSC assesses, and adds their own advice as to what actions to take regarding formal designation of that species and actions needed to address the species' status.

3.3**Strategy 3** Formally Designate Endangered or Threatened Species

After each meeting, the ESCC recommends to the Minister responsible for Alberta's wildlife on matters relating to those species for which legal designation would assist in management and conservation efforts. After considering the recommendations of the ESCC, the Minister may formally designate *Threatened* and *Endangered* species by regulation under Alberta's *Wildlife Act*.

A variety of regulations provide protection for these species, including the following: up to a \$100,000 fine and/or six months in jail for killing or trafficking in an *Endangered* Animal, and year-round prohibitions against disturbing the nest or den of an *Endangered* Animal. The ultimate goal of formally designating a species as *Threatened* or *Endangered* is to facilitate management and recovery efforts necessary to restore viable populations.

3.4**Strategy 4** Recovery Planning for Endangered and Threatened Species

A recovery plan must be produced for *Endangered* and *Threatened* species. A recovery plan contains three elements:

1. A summary of current biological status of the species and an evaluation of the factors which have contributed to its decline.
2. A strategy indicating recovery goals and the strategies necessary to mitigate limiting factors and maintain or recover populations.
3. An action plan that lists the specific activities (including costs, schedules, and participating agencies) that will be completed to achieve the goals of the recovery program.

The recovery planning process, including the drafting of a recovery plan, is typically managed by a recovery team. These teams are established for each *Threatened* or *Endangered* species, with multi-species teams and recovery programs being established in some cases. Teams are initiated by the Minister of Sustainable Resource Development and facilitated and chaired by a designated department biologist. Teams include biologists, species' experts and stakeholders, including community and aboriginal representation. They compile the appropriate biological information from detailed status reports and other sources, identify limiting factors, and propose appropriate recovery goals, strategies and actions. Recovery plans include a chapter addressing socio-economic factors that may influence recovery success, plus consideration of any socio-economic implications of recommended recovery actions. This delivers upon the socio-economic "foundational element" of the *National Framework for Species at Risk Conservation* (See Section 1.1). Whenever possible, teams integrate Alberta recovery plans and programs with national and international efforts. Provincial plans should be compliant with the requirements of the federal *Species at Risk Act* (SARA).

Draft recovery plans are forwarded to the ESCC for review. The ESCC review process serves as an opportunity to gauge public support. Careful selection of team members and ESCC review provides opportunity for community and aboriginal influence in recovery planning; however, in some cases additional public comments may also be sought through open houses or other consultation approaches. Final plans are then forwarded to the Minister for approval and publication.

Recovery plans and programs will change over time as to reflect changes in the status of species. Progress in meeting recovery goals is tracked and reported on an annual basis. Plans are updated on a regular basis, generally every five years.

In many cases, species that are listed as *Threatened* or *Endangered* in Alberta will have similar designation at the national level. In these instances, national recovery plans may be drafted by federal agencies with input and review from the provincial government. Alberta's Fish and Wildlife staff may participate in the preparation of national recovery plans to ensure that they complement provincial recovery plans or management activities. National recovery plans are reviewed by the provincial Director of Wildlife Management or Director of Fisheries Management before they are finalized.

3.5

Strategy 5 Preventing Species from Becoming At Risk

It is more biologically sound and economically cost-effective to attempt to prevent species from becoming at risk than it is to recover them once they have become *Endangered* or *Threatened*. Managing ecosystems, protecting habitats and managing human land use should be done in ways that ensure healthy, viable long-term populations of wild species. Such preventative actions help to keep species from becoming *Threatened* or *Endangered*.



wolverine

3.5.1 Management Plans

One possible outcome of the General Status Process is the identification of Sensitive species that are not endangered but require active management or conservation to prevent them from becoming at risk. High-priority Sensitive species may be further assessed through the Detailed Status Process leading to designation as Species of Special Concern. In addition, species with a general status of May be at Risk that have been assessed by the ESCC for possible listing as *Threatened* or *Endangered* but were not considered to be at immediate risk may still require special management and these may also be listed as Species of Special Concern.

Management plans will be prepared for Species of Special Concern within three years of designation, unless a shorter time frame is recommended by the ESCC or directed by the Minister. These management plans are intended to be a resource tool for the Fish and Wildlife Division and for provincial and regional land and water management agencies. The plans are designed to provide guidance for species and habitat conservation and to be used in land, water and resource management decisions.

Management plans include goals, objectives and actions. They address the biological status of the species, potential limiting factors, possible land use conflicts, data gaps and needs, and appropriate management strategies necessary to maintain viable populations. The plans are more concise than recovery plans. In some cases it may be possible to group several species with similar needs into a single plan focused on a particular ecosystem or geographic area.

Management plans are generally prepared by Fish and Wildlife biologists, and may be reviewed by species' experts. In some cases experts may be consulted earlier in the process. If other government departments or non-government organizations are identified as being responsible for actions, they should also be given the opportunity to review the plan. Upon completion of this process, each plan will be provided to the Director of Wildlife Management or Director of Fisheries Management for approval.

3.5.2 Other Prevention Initiatives

Sensitive species and Data Deficient species may also need special management to prevent them from becoming *Endangered* or *Threatened*. Although formal management plans may not be required, it is incumbent on the Fish and Wildlife Division to conserve these species. Actions needed may include inventory, monitoring, and specific management activities. In some areas it may be possible to integrate the needs of these species into biodiversity monitoring initiatives, landscape planning, and multi-species stewardship programs.

The national framework suggests conservation of biodiversity as a preventative measure. Application of biodiversity principles to land management has the potential to sustain a variety of habitat types and associated species. There are, however, shortcomings in the coarse-filter approach and simple random sampling protocols currently used in that they do not monitor the rarer habitats or smaller portions of the landscape that are important to species at risk. Given that any future reductions in Alberta's biodiversity would likely be due to losses of *Endangered* species,

changes in biodiversity monitoring methods should be encouraged. A suggested modification is the initiation of long-term stratified sampling of landscapes occupied by high-priority species at risk, through methods such as intense area searches in high-quality habitats. This monitoring could help in tracking success in conservation of biodiversity and effectiveness of biodiversity approaches as a protective measure against species' endangerment.

3.6

Strategy 6 Implementing Recovery and Management Actions

Successfully implementing approved recovery and management plans is the true measure of how well the Alberta program provides for the needs of species at risk. Success can only be achieved if appropriate changes are made in the way we manage a species and its habitat. Implementing recovery actions is guided by a recovery team, relies on cooperative efforts of stakeholders and may be carried out by existing agencies, non-government organizations and concerned individuals.

In some cases, implementing recovery may include the need for regulatory changes. This may require ministerial involvement in seeking the support and participation of other departments and levels of government.

Actions identified in Species of Special Concern Management Plans are coordinated by the provincial species lead, but like those in recovery plans, may be implemented by a variety of government and non-government organizations. Implementation of management plan actions will usually rely on existing structures and organizations and on the development of new and creative partnerships with government, industry, landowners and land managers. Recovery and management plan actions should lead to direct improvement in conditions of a species' population and/or habitat. Actions may include inventory and monitoring, habitat management and conservation, public education initiatives and other activities. In some cases, plans may provide recommendations to revise existing, or develop new, policies and guidelines to assist in the long-term maintenance of the species and its habitat.

Among the most important aspects of implementation of both recovery and management actions are the transfer of information and encouraging awareness of the needs of these species. This sharing and communicating can enable land and resource managers to incorporate appropriate conservation considerations into their land-use decisions. In this context, publication of recovery plans and management plans and interpretation of appropriate information into educational and communications materials is important. Stronger working relationships with universities and other research and management agencies is also needed to fill data gaps.

Upon receiving ministerial approval, a recovery plan will be used as a resource for program development within Sustainable Resource Development, and should be integrated into the programs of other departments, as needed.

3.6.1 Single-Species Conservation and Stewardship Projects

In many cases, recovery and management can be effectively accomplished using recovery efforts specifically focused toward an individual species. These single-species efforts comprise the historical approach of the species at risk program, and continue to be the primary methods of recovery implementation. Successful examples include the peregrine falcon recovery program, the piping plover conservation program and the swift fox reintroduction program.

One advantage of single-species recovery implementation is the provision of a clear focus for activities specifically designed to recover that target species. Single-species approaches are necessary for species that require a strong emphasis on intervention (e.g., controlled breeding, reintroduction of populations, habitat development).

Single-species projects are easiest to implement in geographic areas that have only a few *Endangered* and *Threatened* species, because people in rural communities tend to respond with reduced tolerance to numerous single-species projects occurring on the same landscape. Even where a multi-species approach may be guiding conservation activities on a particular landscape, this generally involves a landscape prioritization that leads to priority single-species recovery initiatives being pursued in certain areas.



western blue flag

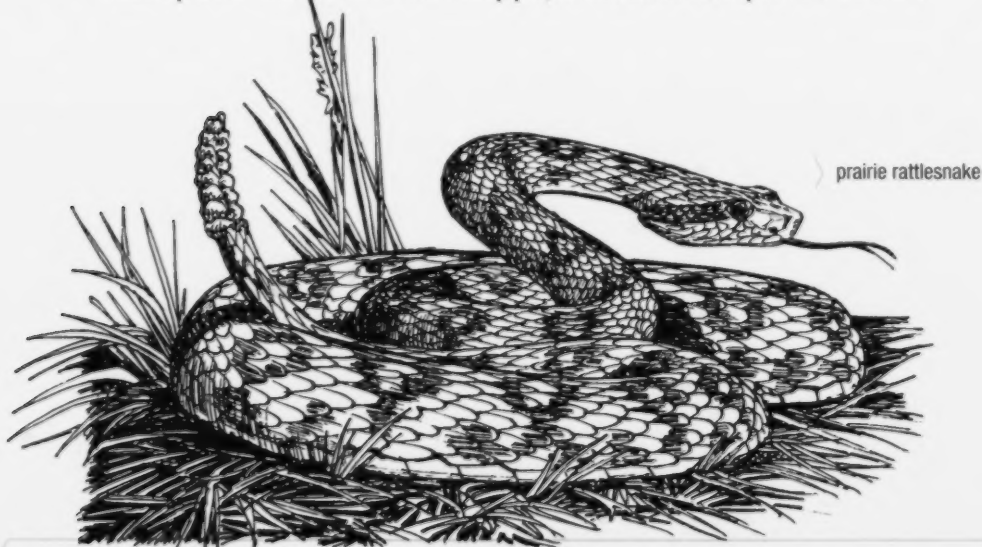
3.6.2 Multi-Species Conservation and Stewardship Projects

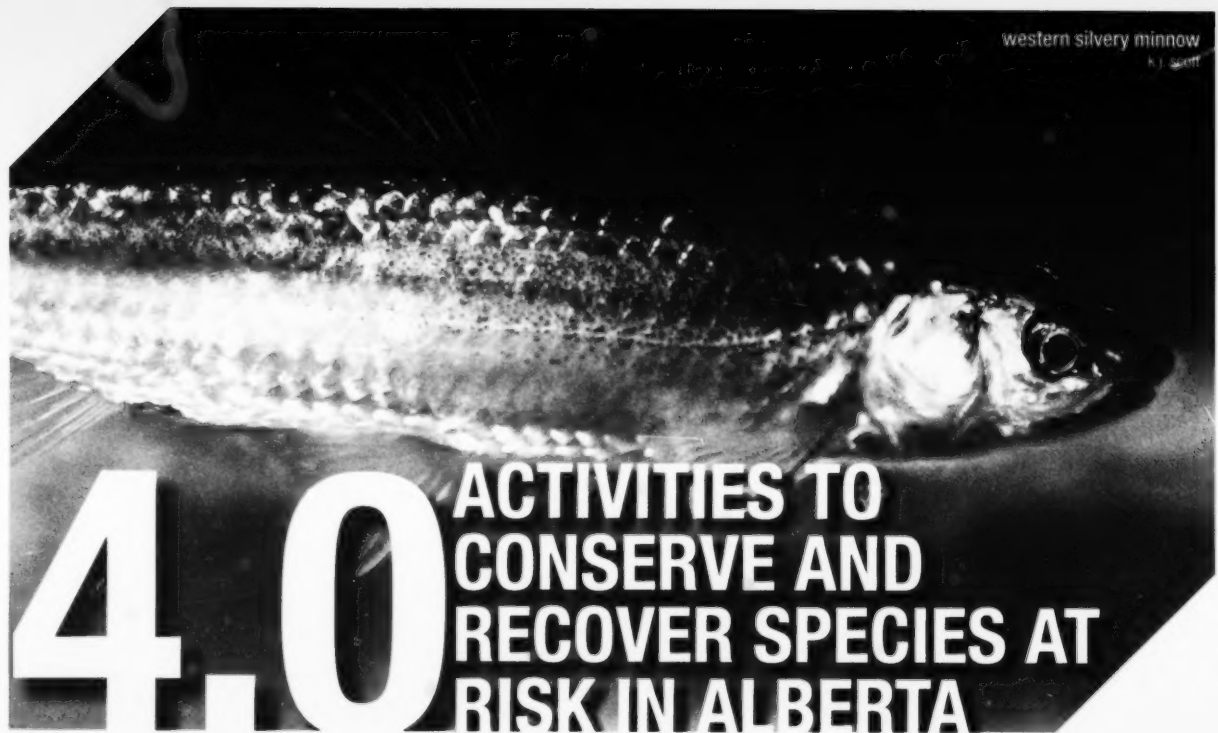
Multi-species initiatives are suited to landscapes where numerous species at risk occur or where there is reduced tolerance toward additional single-species activities. One example is the Grassland Natural Region where numerous species at risk are associated with remaining native prairie habitats. On such landscapes, there are efficiencies to be gained through addressing recovery needs of several species through multi-species conservation and stewardship projects.

On landscapes with several *Endangered* and *Threatened* species, single-species recovery efforts may be confounded by conflicting or competing actions being encouraged in their recovery plans. For example, it may be desirable to remove woody vegetation to benefit burrowing owl and sage grouse, whereas in the same area, the same woody vegetation may provide habitat for ferruginous hawk and loggerhead shrike. Similarly, prescribed recovery actions may conflict with other ecological needs such as range health. Under these circumstances, it may be necessary to consider the implications of such recovery actions on other species, and on habitat and ecological processes.

To be successful, multi-species conservation and stewardship projects need to include a landscape analysis to delineate appropriate geographic areas for the recovery actions of multiple *Endangered* and *Threatened* species. Detailed assessments serve to integrate single-species recovery actions with other species' objectives and to avoid conflicts with ecological processes and function. Such an assessment may include identifying areas of appropriate scale and distribution where single-species recovery actions may still be preferred. The end product of multi-species conservation and stewardship projects should be the implementation of appropriate recovery actions for priority *Endangered* and *Threatened* species on the parts of the landscape that hold the greatest potential for recovery.

Currently about 75 per cent of Alberta's species at risk reside in the native habitats of the Grassland Natural Region. Many of these are being addressed through a large multi-species conservation and stewardship program known as MULTISAR, which is a multi-partnered initiative managed by Sustainable Resource Development and the Alberta Conservation Association. As more *Endangered* and *Threatened* species are identified in other natural regions such as the boreal forest, additional multi-species conservation and stewardship projects should be developed for those areas.





4.1

Strategy 1 Activities

General Status

- a) Carry out an Alberta General Status exercise to evaluate the relative security of wild populations of all species, in a manner consistent with other Canadian jurisdictions using the national *Guidelines for Assessing the General Status of Wild Species in Canada*.
- b) Work toward including all known vertebrate, invertebrate, and plant species, plus some selected subspecies, in the Alberta General Status process. Incorporate new taxonomic groups into the general status process according to or ahead of national timelines.
- c) Report on the Alberta General Status of wild species every five years, including provision of a searchable online database and a downloadable report and communication materials.
- d) Participate in the national roll-up of General Status ranks for all assessed species to facilitate preparation of National General Status ranks.
- e) Develop and implement data collection strategies for species for which current data/information/knowledge is inadequate to determine status. These species may include those assessed as Undetermined by the General Status evaluation and Data Deficient by the Detailed Status evaluation, new groups of taxa for which there is little information (e.g., invertebrate and plant groups), and species assessed as May be at Risk and Sensitive.

- f) Continue to build functional linkages to Fish and Wildlife databases and other data sources, including the Alberta Natural Heritage Information Centre (ANHIC). Where data and information are limited, provide opportunity for broad input and use expert knowledge and opinion. Coordinate reviews of General Status evaluations with ANHIC's review of NatureServe S-ranks.

4.2

Strategy 2 Activities

Detailed Status

- a) Prioritize and select among candidates for detailed status evaluation each year. High-priority candidates may include species assessed as May be at Risk or Sensitive by the general status process, species that underwent detailed status evaluation more than five years previously (or less if directed by the Minister), and species occurring in Alberta that have been assessed, or are candidates for assessment, at the national level.
- b) Collect, compile and report on the detailed information necessary to evaluate the current status and predict future risks to species selected for status assessment.
- c) Prepare and publish detailed status reports for several high-priority May be at Risk and other species of concern each year. These reports will be achieved through commissioning of species' experts to compile Alberta Wildlife Status Reports summarizing all available information on the population size, trend and distribution, habitat needs and limiting factors in Alberta. These reports will continue to be directed and published jointly by the Alberta Conservation Association and the Fish and Wildlife Division. New data collection may be needed for some species.
- d) Continue the SSC assessments of relative risk of extinction by measuring the current and predicted status against the guidelines of the IUCN (World Conservation Union) using information in prepared Wildlife Status Reports, plus any additional data or knowledge about the species.
- e) Forward SSC recommendations to the ESCC for the development of Initial Conservation Action Statements for species. The ESCC will then make recommendations on status and conservation measures to the Minister of Sustainable Resource Development.
- f) Report regularly on this process on the Species at Risk Program website and in biennial reports of Alberta's Endangered Species Conservation Committee.
- g) Manage species that do not meet the criteria for *Threatened* or *Endangered* but that qualify as Species of Special Concern, and which require focused conservation effort to prevent them from becoming at risk in the future, through development and implementation of management plans, within three years of designation as Species of Special Concern. Conservation steps needed for both Species of Special Concern and those designated as Data Deficient will be recommended by the ESCC, and implemented by Sustainable Resource Development and partners.
- h) Designate species for which information is considered inadequate to determine listing as Data Deficient species; develop and implement appropriate data collection strategies for these species.

4.3

Strategy 3 Activities

Formally Designate Endangered or Threatened Species

- a) Upon the advice of the ESCC, and direction of the Minister, amend regulations under Alberta's *Wildlife Act* to designate species as *Threatened* or *Endangered* in Alberta.
- b) Develop protective regulations under the *Wildlife Act* for fish, invertebrates, and plants, to complement those already in place for *Endangered* and *Threatened* mammals, birds, reptiles and amphibians. Develop additional regulatory amendments to extend protections to other taxa.
- c) Amend Alberta's *Wildlife Act* and *Wildlife Regulation* to allow formal designation of Species of Special Concern.
- d) Designate a staff biologist, at time of listing of each species, to be the provincial species coordinator to lead recovery planning and implementation.
- e) Examine whether a provincial Species at Risk Act would enhance the current legal measures provided under Alberta's *Wildlife Act* to accommodate species at risk in the province.

4.4

Strategy 4 Activities

Recovery Planning for Endangered and Threatened Species

- a) Establish recovery teams to develop provincial recovery plans within one year for *Endangered* species and two years for *Threatened* species.
- b) Include representation from the department, appropriate technical specialists, and stakeholders on recovery teams.
- c) Provide draft recovery plans to the ESCC for their review.
- d) Gauge the level of public interest, through the ESCC review, and consider additional public input for some plans.
- e) Submit final Alberta recovery plans to the Minister along with any regulatory and policy requirements.
- f) Initiate specific legal, regulatory, and policy authorities needed to facilitate recovery programs.
- g) Where significant regulatory amendments and/or policy changes are needed, seek approval of the relevant Cabinet Policy Committee.
- h) Adopt approved recovery plans as the Alberta government's policy for that species, with identified actions becoming priorities for staff and divisions of the Ministry of Sustainable Resource Development.
- i) Request involvement of other departments or other levels of government when a recovery plan identifies them as having a direct role in implementation of the identified actions, or if they may be affected by implementation of the plan.
- j) Integrate Alberta recovery teams and plans with national recovery plans and processes, wherever possible.

4.5

Strategy 5 Activities

Programs to Prevent Species from Becoming Endangered or Threatened

- a) Identify species for which management plans are needed (primarily Species of Special Concern and some Sensitive species).
- b) Prepare and publish the management plans within the prescribed time period.
- c) Identify populations, limiting factors, habitat requirements, data needs, and appropriate management strategies necessary to maintain viable populations.
- d) Encourage and facilitate research needed to fill data gaps for Data Deficient species and species of undetermined status.
- e) Designate a department biologist species lead for each Species of Special Concern, Data Deficient and high-priority Sensitive species to coordinate management planning and other initiatives.
- f) Work collaboratively to incorporate management of these species into government and non-government conservation and stewardship programs.

4.6

Strategy 6 Activities

Implementing of Recovery and Management Actions

- a) Coordinate and facilitate the implementation of recovery plans for *Endangered* and *Threatened* species, with actions being carried out by government, non-government organizations, and private individuals.
- b) Coordinate and facilitate the implementation of management plan actions for Species of Special Concern.
- c) Implement recovery and management actions through conservation and stewardship projects with single- or multi-species' focus.
- d) Encourage the development of standards, guidelines, beneficial management practices and industrial review processes to assist individuals, corporations and government in planning development activities in a manner compatible with species' recovery or management.
- e) Encourage the review and revision (as needed) to land and water resource management policies and regulations to provide the needs of species at risk and to reduce likelihood of species becoming at risk.
- f) Review the implementation tables in recovery plans annually to track progress in implementation of recovery actions.
- g) Create new partnerships with universities, government, and non-government institutions to implement research-related recovery and management actions

5.0 PROGRAM RESOURCES AND PROJECTS

5.1 Balance Between Program Areas

Six program areas are described, based upon the strategies in the preceding chapter. They are General Status, Detailed Status, Legal Listing, Recovery Planning, Prevention Programs, and Recovery and Management Implementation. Alberta's species at risk program will strive toward a degree of balance by making progress in each of the six program areas annually. This progress will be provided by projects and activities at the provincial level and within priority landscapes.

5.2 Program Resource Needs

Continued progress in delivering Alberta's Species at Risk Program will require additional resources. Estimated needs are based upon a review of ministerial commitments, implementation tables in approved recovery plans, committee costs, and species at risk monitoring programs. The priorities identified in this strategy do not represent approved business plans or funding allocations by the Alberta government. These priorities are meant to provide suggested future direction, which may be used for planning purposes.

The following priorities are identified for the five-year period of this strategy:

- General status assessments, detailed status report contracts and publishing, operational costs of the ESCC and SSC, and Data-Deficient species surveys.
- Progressive implementation of action items identified in ministerial-approved Initial Conservation Action Statements.
- Recovery planning for all Alberta *Endangered* and *Threatened* species.
- Management planning for selected Species of Special Concern.
- Progressive implementation of action items in ministerial-approved provincial recovery plans.
- Implementation of action items in additional recovery plans that will be approved within the five-year period of this strategy.
- Emphasis on staffing program areas and geographic areas where high-priority species at risk activities are needed.

5.3

Project Prioritization

Annual projects are an important component of the species at risk program. They provide capability for the program to respond to changing priorities resulting from general and detailed status reviews, species listings, and recovery planning. The projects also allow for the development of recovery implementation strategies through funding of new single- and multi-species conservation and stewardship initiatives or through partnering in existing ones. The Species at Risk project allocations are matched, on average, by outside partner funds of three to four times the amount provided by the Department. This results in annual species at risk projects being an excellent conservation expenditure for the Alberta government.

Annual project funding prioritization is done using a process based upon the following criteria:

- Higher ranking for more highly endangered species.
- Higher ranking for projects delivering upon ministerial commitments identified in provincial recovery plans, or ministerial-approved ESCC/SSC conservation action statements.
- Higher ranking for projects providing direct and immediate benefits for species or their habitats.
- Higher ranking for projects delivering actions identified in national recovery plans.
- Consideration of levels of partnership contributions, as a secondary criterion.

Project funding is made by departmental allocation on an annual basis. The Species at Risk Section Head guides individual project decisions, based upon a prioritization table and considering input from other program and area managers, and is accountable to the Director of Wildlife Management for final decisions on project approvals.

5.4

Recommended Future Direction

5.4.1 Program Delivery and Structure

The Species at Risk Program is coordinated through a work unit within the Wildlife Management Branch. Area species at risk biologists operate within Area work units. In addition, several Area Wildlife and Fisheries Biologists spend part of their time on non-game/species at risk projects.

Work plans are determined by the managers of individual work units, but are strongly driven by the general and detailed status processes, *Wildlife Act* jurisdictional requirements, and ministerial commitments related to recovery planning and implementation of conservation and stewardship actions. The broad scope of the program requires that work plans be developed through a cooperative process involving branch and area managers and staff. Increasing demands for recovery/management planning and implementation, combined with increasing threats and emerging issues, creates the need for additional provincial species at risk staff in Alberta. Perceptions of a less than adequate provincial government resourcing could stimulate potential involvement of the federal government in management of Alberta's species at risk. This involvement could lead to increased federal staff presence in Alberta communities, delivering species at risk programs for Alberta's wildlife.

5.4.2 Program Staff

In early 2008 there were four positions in the Wildlife Management Branch's Non-game and Species at Risk unit, with species status and provincial program responsibilities. There were also four regional species at risk biologists, all working within the Prairie Area of the province. The following subsections identify several program areas and geographic areas where increased emphasis is recommended.

NORTHERN ALBERTA

- Northeastern Alberta: concentrating on management and recovery of whooping crane, peregrine falcon, shortjaw cisco, several sensitive species, and planning and approvals related to the high levels of industrial developments (e.g., oil sands).
- North-central Alberta: working closely with Provincial Parks (Boreal Centre for Bird Conservation), industry and academic institutions on development of non-game multi-species and landscape approaches for the boreal forest ecosystem.
- Northwestern Alberta: addressing recovery planning and implementation for species such as trumpeter swan, wood bison, and a large number of sensitive species.

FISH SPECIES AT RISK

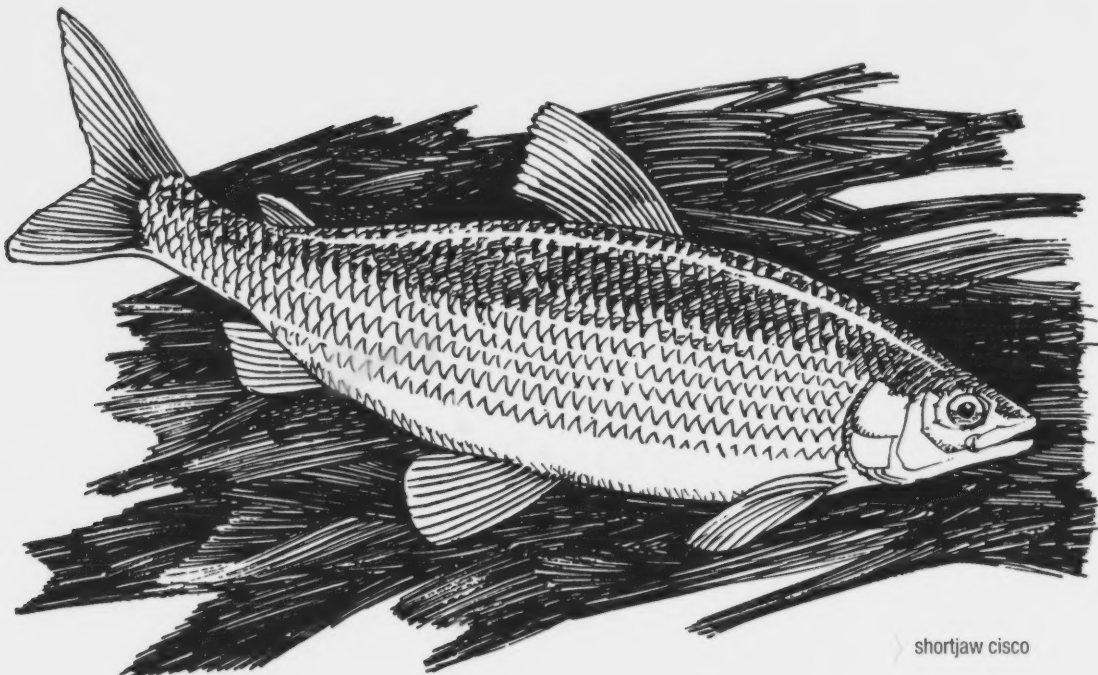
The Species at Risk Program includes responsibilities for fish listed or proposed for provincial and federal listing as *Endangered* or *Threatened* species. There are several recent ministerial commitments related to fish. There is an increased need for communication and progress on these commitments, as well as for increased recovery planning and implementation capability for lake sturgeon, western silvery minnow, east-slope sculpin, stonecat, and westslope cutthroat trout.

PLANT SPECIES AT RISK

SARA listings of Alberta plant species and third party legal challenges to Alberta's jurisdiction for *Endangered* and *Threatened* plants create the need for increased emphasis on rare plants. In addition, four plant species were recently listed in Alberta's *Wildlife Act*, and there may be more species of plants listed over the next several years. Plant regulations, in development at time of preparation of this document, will further strengthen provincial management in this area. Areas of focus would include recovery planning and implementation for listed plants, development of survey protocols, and participation in industrial mitigation measures to conserve rare plants.

MOUNTAIN/FOOTHILLS FORESTRY

Tree species in mountain and foothills ecosystems being threatened by disease and insect pests require special management. Listing and subsequent recovery planning and implementation are needed for some tree and forest plant species.



shortjaw cisco

MULTI-SPECIES CONSERVATION INITIATIVES

The MULTISAR project has demonstrated success of a multi-species stewardship initiative for species at risk on the Alberta prairie landscape. That project was initially developed for the small landscape of the Milk River Basin, and was subsequently expanded to all of prairie Alberta, largely facilitated through a temporary allocation of funds from the Innovation Program of Ministry of Advanced Education and Technology. MULTISAR would be an appropriate long-term program for management within Sustainable Resource Development.

RECOVERY PLANNING AND IMPLEMENTATION

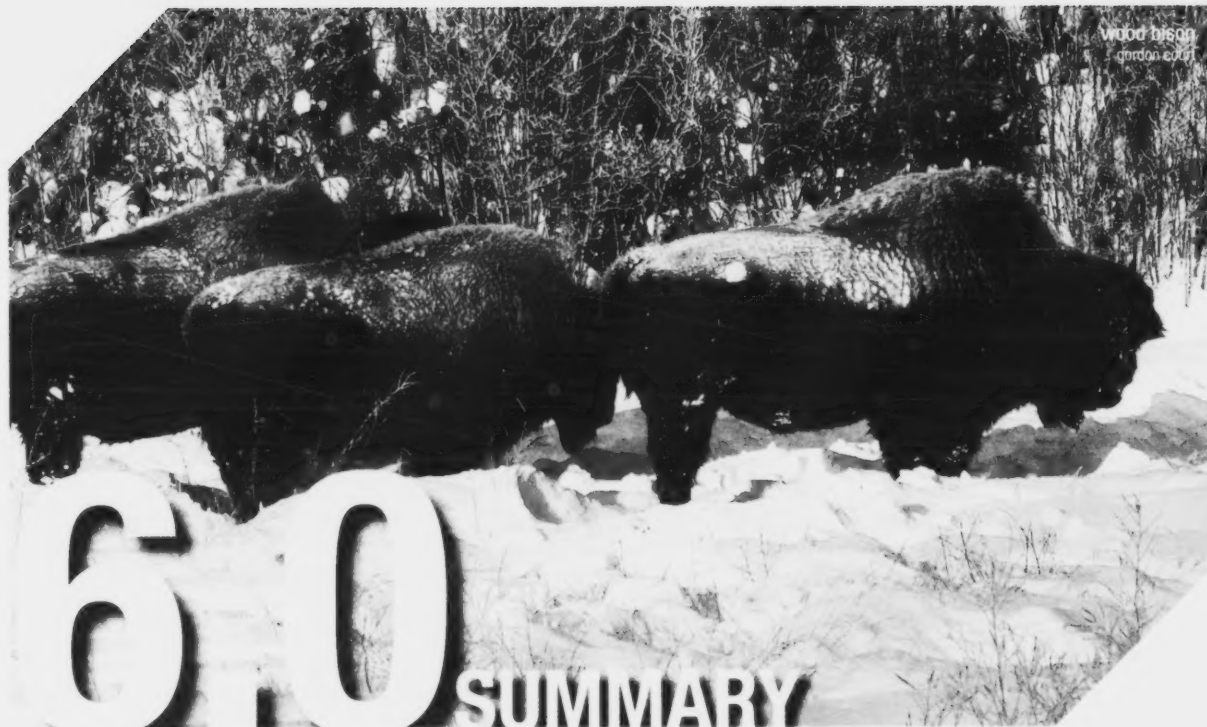
The preparation of recovery plans is a time-sensitive, concentrated effort requiring coordination of a diverse team and access to appropriate technical and scientific experts. Some areas have several recovery planning exercises active at the same time. This situation is likely to increase over the period of this strategy, with additional emphasis needed to facilitate recovery implementation.

PRIORITY SPECIES

Focused efforts are needed for the conservation and recovery of the three currently identified priority species: caribou (*Threatened*), bison (*Endangered*) and grizzly bear (pending status designation). A provincial coordinator for priority species plus several area wildlife staff spend portions of their time on conservation and recovery of these three species. Recovery plans provide recommendations for these species. Areas of emphasis will need to include caribou range planning, grizzly conflict prevention, communication and education programs, development of industrial guidelines, and direct species' management.



woodland caribou



This document outlines Alberta's strategy for conservation and recovery of species at risk. It describes general and detailed status processes, legal listing, recovery planning, measures to prevent endangerment, and recovery/management implementation.

Alberta's Strategy for the Management of Species at Risk (2009-2014) provides information on the planning processes and actions needed for the management of Alberta's species at risk within a national context. Enhancement of Alberta's species at risk program will be key to maintaining Alberta's biodiversity. It will help to ensure environmental and economic health of the province and the social well-being of Albertans.

The process of managing species at risk in Alberta will be sustained by a focused and ongoing program commitment. As we gain more information, knowledge and experience, our ability to recognize problems and implement appropriate management for species at risk will improve. However, as human use of our natural environment changes, new challenges will present themselves. *Alberta's Strategy for the Management of Species at Risk (2009-2014)* will help to organize and focus Albertans' efforts to meet these demands. The strategy will need to be revisited in the 2013/2014 fiscal year, to revise it for the subsequent five years.



tiny cryptanthe



- The General Status of Alberta Wild Species reports, detailed status reports, and species at risk project reports may be viewed on the provincial species at risk web page <http://srd.alberta.ca/fishwildlife/speciesatrisk/>
- The *Wildlife Act* and *Wildlife Regulation* may be viewed on the Alberta Queens Printer web page <http://www.qp.gov.ab.ca/catalogue/>
- Information on the ESCC and SSC may be viewed on the Endangered Species Conservation Committee web page <http://srd.alberta.ca/fishwildlife/escc/>
- Information on the federal *Species at Risk Act* and national programs and processes may be viewed on the national species at risk web page <http://www.sararegistry.gc.ca/>
- Sustainable Resource Development Business Plan 2008-2011 may be viewed on the Sustainable Resource Development web page <http://srd.alberta.ca/>



Weidemeyer's admiral



Endangered, Threatened and Special Concern Species

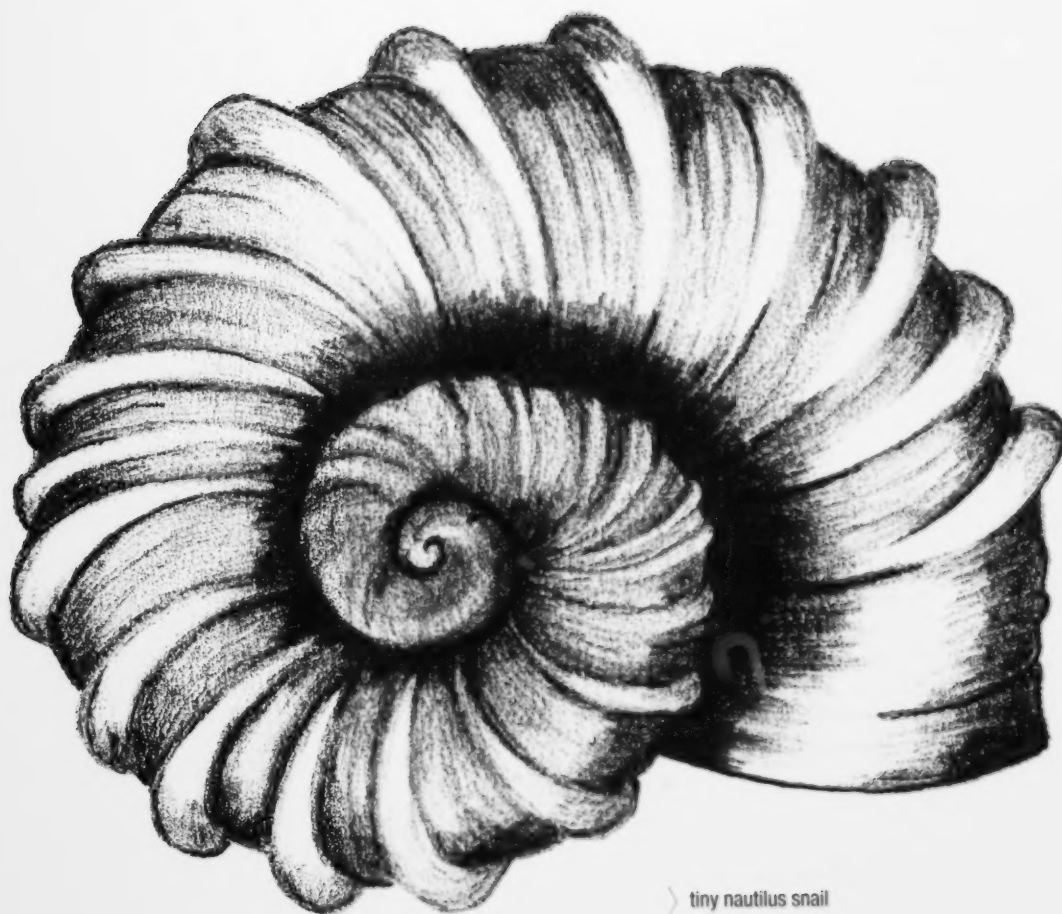
This list summarizes the *Endangered* and *Threatened* species in Alberta, as designated in Schedule 6 of the *Wildlife Regulation* in early 2008. It also includes species recommended by the Minister for Species of Special Concern status.

Endangered Species: swift fox, bison¹, whooping crane, sage grouse, piping plover, Ord's kangaroo rat, burrowing owl, ferruginous hawk, mountain plover, short-horned lizard, tiny cryptanthus, western spiderwort, soapweed,

Threatened Species: woodland caribou, barren ground caribou, northern leopard frog, trumpeter swan, peregrine falcon, small flowered sand verbena, lake sturgeon, shortjaw cisco, St. Mary sculpin, western silvery minnow, stonecat.

Species of Special Concern: Sprague's pipit, long-toed salamander, long-billed curlew, loggerhead shrike, black-throated green warbler, harlequin duck, bull trout, white-winged scoter, prairie falcon, barred owl, western blue flag.

¹Only Bison bison (Bison) that are found or killed on or captured from the lands within the following boundaries are Endangered animals: Commencing at the intersection of the Alberta Northwest Territories boundary and primary Highway 35; thence southerly along primary Highway 35 to the north boundary of the Paddle Prairie Metis Settlement; thence westerly along the north boundary of the Paddle Prairie Metis Settlement to the sixth meridian; thence southerly along the west boundary of the Paddle Prairie Metis Settlement (the sixth meridian) to the right bank of the Chinchaga River in Township 102; thence upstream along the right bank of the Chinchaga River to the Alberta British Columbia boundary; thence northerly along the Alberta British Columbia boundary to its intersection with the Northwest Territories boundary; thence easterly along the Alberta Northwest Territories boundary to the point of commencement.



> tiny nautilus snail

ALBERTA'S STRATEGY FOR THE MANAGEMENT OF
SPECIES AT RISK
(2009-2014)



Alberta